

II. CLAIM AMENDMENTS

1. (Currently Amended) A method of acquiring a network address in a communications network, the method comprising the steps of:

establishing an entity comprising information on network addresses within a subnetwork;

sending a network address request from a first node to a second node without an interface identifier;

creating a link with a link identifier unique within the subnetwork between at the first node and at the second node;

determining a network address for the first node on the basis of the link identifier;

checking by the entity whether the determined network address is unique; and

accepting the network address if the determined network address is unique.

2. (Original) A method according to claim 1 in which the link identifier is generated statically based on information identifying one of the nodes.

3. (Original) A method according to claim 1 in which the link identifier is generated randomly by one of the nodes.

4. (Previously Presented) A method according to claim 1 in which the information on network addresses is a list of link identifiers or network addresses in the subnetwork.
5. (Original) A method according to claim 4 in which the list comprises link identifiers which have previously been assigned to nodes.
6. (Original) A method according to claim 5 in which uniqueness checking is accomplished by the entity referring to the list of previously assigned link identifiers or network addresses.
7. (Original) A method according to claim 6 in which uniqueness checking is carried out by the entity referring to a routing table.
8. (Original) A method according to claim 6 in which uniqueness checking is carried out by the entity referring to a neighbor cache.
9. (Original) A method according to claim 4 in which the list comprises link identifiers which are unique and has not previously been assigned.
10. (Original) A method according to claim 9 in which uniqueness checking is accomplished by the gateway selecting a link identifier or a network address from the list of link identifiers or network addresses which have not yet been assigned.
11. (Currently Amended) A method according to claim 1 in which the information is that the entity has an identifier which is useable ~~an~~ used to create a unique network address.
12. (Currently Amended) A method according to claim 11 in which uniqueness checking is accomplished by the entity referring to

the information on network addresses it contains and determining that it has a link identifier which is useable~~can be used~~ to create a unique network address.

13. (Previously Presented) A method according to claim 1 in which the link identifier is transferred between the first and the second nodes from a sender to a recipient.

14. (Original) A method according to claim 13 in which the recipient of the link identifier discards it and generates a different link identifier which is checked for uniqueness.

15. (Original) A method according to claim 13 in which if the link identifier is not unique, the recipient chooses a unique link identifier which it sends to the sender.

16. (Previously Presented) A method according to claim 1 in which the network address is derived from the link identifier and a network prefix.

17. (Original) A method according to claim 16 in which the network prefix is obtained by means of a router solicitation sent between the first and second nodes.

18. (Original) A method according to claim 16 in which the network prefix is obtained by means of a router advertisement which is sent automatically between the first and the second node.

19. (Previously Presented) A method according to claim 16 in which there are a plurality of network prefixes used to create a plurality of network addresses for a node.

20. (Previously Presented) A method according to claim 1 in which the communications network comprises a plurality of subnetworks.

21. (Previously Presented) A method according to claim 1 in which the first node is a mobile station.

22. (Previously Presented) A method according to claim 1 in which the second node is a gateway.

23. (Previously Presented) A method according to claim 1 in which the communications network is a GPRS system.

24. (Original) A method according to claim 1 in which the link is a PDP context.

25. (Previously Presented) A method according to claim 1 in which the network address is a IPv6 address.

26. (Currently Amended) A communications network comprising:

a subnetwork;

a first node and a second node, the first node being able to send a network address request to the second node without an interface identifier;

an entity comprising information on network addresses within the subnetwork, the entity being able to create a link with a link identifier unique within the subnetwork between the first node and the second node and to determine a network address for the first node on the basis of the link identifier;

wherein the entity is able to check whether the determined network address is unique and to accept the network address if the determined network address is unique.

27. (Original) A mobile terminal to operate with the communications network of claim 26.

28. (New) A method according to claim 1 in which the communications network is a mobile station.

29. (New) A method according to claim 1 in which the link is a mobile packet data connection.

29. (New) A mobile terminal to operate with a communications network, the communications network comprising:

a subnetwork;

a node;

an entity comprising information on network addresses within the subnetwork, the entity being able to create a link with a link identifier unique within the subnetwork between the mobile terminal and the node and to determine a network address for the mobile terminal on the basis of the link identifier, and the entity being able to check whether the determined network address is unique and to accept the network address if the determined network address is unique; and

wherein the mobile terminal is able to send a network address request to the node without the interface identifier.

30. (New) A network element adapted to operate in a communications network, the communications network comprising:

a subnetwork;

a node;

the network element being associated with an entity comprising information on network addresses within the subnetwork, the entity being able to create a link with a link identifier unique within the subnetwork between the node and the network element and to determine a network address for the node on the basis of the link identifier, and the network element being able to receive a network address request from the node without the interface identifier; and

wherein the entity is able to check whether the determined network address is unique and to accept the network address if the determined network address is unique.

31. (New) A network element according to claim 30 in which the network element is a gateway.

32. (New) A network element according to claim 30 in which the network element comprises the entity.

33. (New) A method of a node acquiring an IP network address in a communications system, the method comprising the steps of:

the node sending a network address request to a gateway over a wireless link requesting a unique interface identifier wherein the network address request does not contain an interface identifier;

the node receiving from the gateway a unique interface identifier;

the node adopting the interface identifier;

the node receiving a network prefix from the gateway; and

the node combining the interface identifier and the network prefix to produce the IP network address.

34. (New) A method of a gateway assigning an IP network address in a communications system, the method comprising the steps of:

the gateway receiving a network address request from a node over a wireless link requesting a unique interface identifier wherein the network address request does not contain an interface identifier;

the gateway sending to the node a unique interface identifier for adoption by the node; and

the gateway sending a network prefix to the node to enable the node to combine the interface identifier and the network prefix to produce the IP network address.